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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/298,798	04/23/1999	YU-CHEUN JOU	QCPA990343	2454

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
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EXAMINER	
ODLAND, DAVID E	

ART UNIT	PAPER NUMBER
2662	

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/298,798	JOU, YU-CHEUN	
	Examiner	Art Unit	
	David Odland	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,5-12,16-21 and 25-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5-12,16-21 and 25-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The following is a response to the communication filed on 02/04/2004.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1,3,5-12,16-21 and 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnerot (USPN 4,281,408), hereafter referred to as Bonnerot, in view of Klein et al. (USPN 6,381,460), hereafter referred to as Klein.

Referring to claims 1,3 12 and 21, Bonnerot discloses a multi-carrier base station operating within a predetermined set of frequencies wherein data components of forward link data are transmitted simultaneously on a plurality of frequency bands (a transmission system wherein data is transmitted on a plurality of frequency bands (see column 3 lines 44-63)), said base station comprising a first transmission subsystem for transmitting a sync channel message on a single carrier frequency of said predetermined set of frequencies (the transmission system transmits a pilot signal on the center frequency (see column 3 lines 44-63)) and at least one additional transmission subsystem for transmitting remaining components of said forward link data on another carrier frequency of said predetermined set of frequencies (other speech signals are transmitted at frequencies that deviate 10 Hz from the center frequency occupied by the pilot

signal (see column 3 lines 44-64)). Bonnerot does not disclose that sync channel message indicates at least a single carrier frequency of a single or multi-carrier subsystem. However, Klein discloses a system wherein a base station transmits a signaling message to a mobile station of a wireless communications system wherein the signaling message includes a number of a channel to be used as the center frequency for future data transmissions (see column 7 lines 6-50)). It would have been obvious to one skilled in the art at the time of the invention to implement this feature in Bonnerot because it will eliminate any ambiguities that are due to a plurality of usable frequency bands that are available, as pointed out by Klein in column 1 lines 63-67. Furthermore, it would make the Bonnerot system more flexible and user configurable by allowing particular center frequencies to be assigned by an administrator at the Operations and Maintenance Center (as shown in figure 1 of Klein). Note, regarding claim 3, since the center frequency of Klein is a single frequency the signaling message does indicate a single frequency as required by the claim.

Referring to claims 5, 16 and 25, Bonnerot discloses the system as discussed above. Furthermore, Bonnerot discloses that the sync channel message is transmitted on one of a set of a preferred frequency channels wherein the number of frequencies in said set of preferred frequency channels is less number of frequencies in said predetermined set of frequencies (the pilot signal is transmitted on a particular frequency, namely 84.140 kHz, which is one of a plurality of a primary FDM group that operates in the range of 60-108 kHz (see column 3 lines 44-64)).

Referring to claims 6, 17 and 26, Bonnerot discloses the system as discussed above. Furthermore, Bonnerot discloses that the set of predetermined frequencies are the set of

frequency bands in a personal communications system block of frequencies (the transmitters are used in conjunction with receivers to make telephony calls and therefore used by people thereby making the frequencies a set of 'personal communications system' frequencies (see column 1 lines 10-15 and 33-39 and column 3 lines 44-63)).

Referring to claims 7, 18 and 27, Bonnerot discloses the system discussed above. Bonnerot does not disclose that the preferred set of channels is 75,150 and 225. However, it would have been obvious to one skilled in the art at the time of the invention to utilize these particular channels because doing so is merely a matter of design choice. Furthermore, since these channels are spaced so far apart and orthogonal, they will help reduce interference, thereby making Bonnerot more reliable.

Referring to claims 8, 19 and 28, Bonnerot discloses the system of rejection of claims 1, 12 and 21 that have similar limitations as 8, 9 and 28 and are therefore rejected under the same prior art as discussed above. However, claims 8, 9 and 28 deal with the receiving side of the network. Bonnerot discloses components of the transmission side of the system and not the receiving side (i.e. the mobile station). Since the components of claims 8, 19 and 28 merely recite the receiver side components that would correspond to transmission side components of the Bonnerot system, it would have been obvious to one skilled in the art at the time of the invention to make a receiver that corresponds to the transmission components of the transmission system in Bonnerot, because doing so would provide a method of communicating with such a transmission system, thereby allowing communications to take place.

Referring to claims 9, 20 and 29, Bonnerot discloses the system as discussed above. Furthermore, Bonnerot discloses that the system operates in a multi carrier system and directs the

receiver to tune to a first frequency and to tune to at least one additional frequency when said mobile station operates in a multicarrier mode (the pilot signal is transmitted at one frequency and the other speech channels at other frequencies, therefore the receiver side would tune to the frequencies to recover the signals (see column 3 lines 44-46)).

Referring to claims 10 and 30, Bonnerot discloses the system as discussed above. Furthermore, Bonnerot discloses that the control processor directs said first receiver subsystem to tune to one of a predetermined set of preferred frequencies (the transmitter transmits using a primary FDM group operating in the range of 60-108 kHz, therefore the receiver would have to tune to these frequencies in order to recover the transmitted signals (see column 3 lines 44-63)).

Referring to claims 11 and 31, Bonnerot discloses the system as discussed above. Furthermore, Bonnerot discloses that the systems use frequency bands within a personal communications system set of frequencies (the transmitters are used in conjunction with receivers to make telephony calls and therefore used by people thereby making the frequencies a set of 'personal communications system' frequencies (see column 1 lines 10-15 and 33-39 and column 3 lines 44-63)). Bonnerot does not disclose that the preferred set of channels is 75,150 and 225. However, it would have been obvious to one skilled in the art at the time of the invention to utilize these particular channels because doing so is merely a matter of design choice. Furthermore, since these channels are spaced so far apart and orthogonal, they will help reduce interference, thereby making Bonnerot more reliable.

Response to Arguments

4. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Odland, who can be reached at (703) 305-3231 on Monday – Friday during the hours of 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached at (703) 305-4744. The fax number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, who can be reached at (703) 305-4750.

deo

February 20, 2004

JOHN PEZZLO
PRIMARY EXAMINER